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The Students of Worcester Polytechnic Institute

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NEXT FULLER ASSEMBLY TO HAVE OLIVER E. SIMMONDS AS SPEAKER

Member of House of Commons to Speak on "Young Britain Looks at the Crisis"

LETTERS WILL BE AWARDED TO MEMBERS OF SWIMMING, TRACK AND BASKETBALL TEAMS

At the Student Assembly to be held today in Alumni Gym, Mr. Oliver E. Simmonds, a member of the House of Commons for Birmingham, England, will speak on "Young Britain Looks at the Crisis."

It is interesting to note that Birmingham, England, is but ten or twelve miles northeast of Worcester, England.

Mr. Simmonds arrived on the S. S. "Majestic" on March 21, 1933. He has the following degrees: M.A. (Cantab), F.R.Ae.S., M.I.Ae.E., M.P.

He has had, on the practical side, a most varied career. He has been a pilot for sixteen years, and for a time he was technical adviser to the Air Ministry, after having taken the first course in Aeronautics at Cambridge. He organized the first Inter-Varsity Air Race, and was largely responsible for the design of the famous racing seaplane, the S-5, that won the Schneider Trophy for Britain. As one of the members of the Parliament for Birmingham, he takes a special interest in aeronautics in the House of Commons.

COMBINED CONCERT WITH FRAMINGHAM FRIDAY

Unitarian Laymen Sponsors

On Friday, March 24, the Musical Association will give a joint concert in collaboration with the association from State Teachers' College at Framingham in the parish house of the First Unitarian Church. The evening's entertainment will be under the auspices of the Laymen's League.

In addition to each club presenting two individual groups of selections, there will be four groups of selections by the combined clubs. The popular Tech quartet will sing and several solos are also on the program. The Framingham Glee Club is composed of seventy-five voices while Tech has about fifty voices.

After the concert the Boyntonians will furnish music for dancing for the remainder of the evening.

The patrons and patronesses are: President and Mrs. Ralph Earle, Mr. and Mrs. Moses B. Kaven, Professor and Mrs. George H. Haynes, Professor and Mrs. Jerome W. Howe, Mr. and Mrs. Samuel S. Edmunds of Brooklyn, N. Y., and Samuel M. Stone of Hartford, Conn.

Dr. and Mrs. Homer Gage, Dr. and Mrs. Leland L. Atwood, Mr. and Mrs. Harrison P. Eddy of Boston, Mr. and Mrs. Charles L. Allen, Professor and Mrs. Theodore H. Morgan, Mr. and Mrs. Charles F. Bailey of Newport News, Va.,

TECH STUDENTS HOST TO A.S.M.E.

Conference to Be Held at W. P. I. on May 12 and 13

The W. P. I. branch of the A. S. M. E. will be hosts for a section of the national society at a conference to be held in Worcester on May 12 and 13.

The first A. S. M. E. Student Branch Conference, which was held in Chattanooga last year by the Group IV colleges, proved so successful that several such conferences are scheduled for this spring.

The first of these will again be held by Group IV on March 31 and April 1 in Birmingham, Ala., when representatives from 15 Branches will meet to enjoy technical sessions with papers provided by students, two luncheon meetings, a banquet, and visits to important industrial plants.

A first prize of \$50 for the best paper has again been made available through the generosity of Mrs. Hillyer, widow of George Hillyer, Jr., who was an active member of the Society for many years. There will be a second prize of \$25 and a third of \$10.

Colleges in Group I, covering the New England States and Northern New York, will meet at Worcester, Mass., as the guests of Worcester Polytechnic Institute, while those in Group II, covering the metropolitan areas of New York and Philadelphia and in New Jersey and Eastern Pennsylvania, will gather at Bethlehem, Pa., as the guests of Lehigh University. The Worcester Section of the Society is making similar arrangements for the New England Group, while the Anthracite-Lehigh Valley Section is doing the same for the students who will attend the conference of the Group II Student Branches.

In all, sixty-three papers will be presented in competition at these four conferences. There will be cash prizes similar to those offered to the colleges in Group IV at each of the other three conferences.

Professor and Mrs. Charles M. Allen, Mr. and Mrs. Paul R. Swan, and Professor and Mrs. Carl F. Meyer.

TECH NEWS ASSIGNMENTS

for
This Week!
Wednesday—4.00 P. M.
Boynton 19

PROM WEEK-END TO COME THE LAST OF APRIL

NEWMAN CLUB WILL HOLD COMMUNION BREAKFAST

James J. Shea, '12 Will Speak

James J. Shea of the class of '12 of Worcester Polytechnic Institute is to speak at the Communion breakfast to be held by the Newman Club on Sunday, April 2. Mr. Shea is at present employed in Springfield, with P. P. Kellogg Envelope Co. He is also the president of the Alumni Association of the Institute.

The breakfast comes directly after the attendance of the Catholics at Tech in a body at Communion at the Immaculate Conception Church at nine o'clock on Sunday morning, April 2. The price of the breakfast has been lowered to thirty cents per man and it is hoped that all will reserve this date for the making of their Easter duty.

JUNIOR PROM AND MASQUE TO COMBINE ON FRIDAY EVENING

First Masque Performance Called for 8 P. M. and Prom Will Commence Following This Performance

FRESHMAN CLASS HEARS LECTURES

Department Heads Deliver Orientation Address

The annual series of orientation lectures for Freshmen was delivered this past week by the heads of the various departments.

On Wednesday in place of the chemistry lecture Professor Howes and Professor Roys, spoke on the Civil and M. E. departments respectively. Professor Howes being the first speaker gave a resume of the many requirements and opportunities of the engineering profession in general and showed that the different departments overlap each other. He then briefly enumerated the various fields that a civil engineer may go into after graduation and read a list of the vocations of 100 graduates of the civil department of the last ten years showing that they were widely distributed.

Professor Roys told what mechanical engineering deals with chiefly and he also mentioned its close alliance with the civil and electrical engineering departments. He stressed the necessity of research and explained that all engineering is cumulative and that a graduate of an engineering school really has to start at the bottom of his profession instead of near the top as college graduates can in some professions.

The Freshmen lost another hour's sleep on Thursday morning when President Earle and Professor Morgan addressed them from 10:00 to 11:00 A. M. Prexy spoke first and explained the difference between a technician and an administrator. He then stressed the necessity of the habit of carefulness and showed that everything in the curriculum is selected with care and is absolutely necessary because the graduate very seldom knows exactly what he is going to need. At the close of his speech President Earle stated the relation between students and faculty. He mentioned the editorial in last week's NEWS and from our interpretation of his opinion of it the editorial was misunderstood.

Professor Morgan, head of the Electrical Engineering department, expressed the belief that we are on the eve of an engineering age greater than anything that history has seen before. He then briefly outlined the main things that electrical engineering deals with. He

BANCROFT HOTEL BALLROOM AND HORTICULTURAL HALL ARE SCENES OF WEEK-END FESTIVITIES

As a climax to Junior Week, the Junior Prom of the Class of 1934 will be held on Friday evening, April 28th in the ballroom of the Bancroft Hotel, following the first performance of the Masque, which is to be presented on the same evening at eight o'clock at Horticultural Hall. The Prom will be held between the hours of ten and three.

The Prom has been set an hour later than customary in order that those attending the Prom may have the opportunity to enlarge their evening of pleasure by attendance at the Masque performance.

The committee, composed of "Bugs" Burns, chairman; "Julie" Gould, "Dick" Goodwin, "Hugh" Osborne, "Hal" Bell, "George" Stevens, "Gordy" Whitcomb, "Dinny" Dwinell, and Warren Davenport are working to make this affair one of the best ever held at Worcester Tech. The orchestral arrangement for the evening will be offered by Ed Murphy with the Lord Jeff Jesters, a singing trio with guitar accompaniment, as a special feature of the entertainment. Attractive favors and programs have been selected, with decorations in black and silver, to bring out a suitable atmosphere for this long awaited occasion.

It is hoped that through this new arrangement with the Masque that more interest and support may be obtained and Junior Week may be remembered for a long time by those who attend the Junior Prom and the Masque presentation.

also pointed out the fact that the curriculum has to be generalized to touch on all major points of the profession.

Doctor Duff and Doctor Jennings were scheduled to address the Freshmen Friday morning but due to a misunderstanding Dr. Duff did not give his address. Dr. Jennings referred to Silas Burlap's letter in the February 28 issue of the NEWS. He made the assertion that catalogues are generally rather indefinite and hard to understand.

REGISTER FOR YOUR
CONDITION EXAMS.
BY MARCH 24

ATTEND TECH-FRAMINGHAM CHORAL CONCERT MARCH 24
PARISH HALL -- FIRST UNITARIAN CHURCH

CALENDAR

TUES., MARCH 21—

9:50 A. M.—Chapel Service.
Rev. A. J. Laurell.
4:30 P. M.—Orchestra rehearsal.
4:30 P. M.—Intramural Bowling, P. S. K. vs. Friars.

WED., MARCH 22—

9:50 A. M.—Chapel Service.
Rev. A. J. Laurell.
11:00 A. M.—Assembly, Oliver E. Simmonds, "Young Britain Looks at the Crisis."
4:30 P. M.—Band Rehearsal.
4:30 P. M.—Intramural Bowling, S. A. E. vs. A. T. O.

THURS., MARCH 23—

9:50 A. M.—Chapel Service.
Rev. Wesley G. Huber.
4:30 P. M.—Glee Club Rehearsal.
4:30 P. M.—Intramural Bowling, T. X. vs. T. U. O.

FRI., MARCH 24—

9:50 A. M.—Chapel Service.
Rev. Wesley G. Huber.
4:30 P. M.—Intramural Bowling, S. O. P. vs. Friars.
8:00 P. M.—Combined Concert and Dance, W. P. I. and Framingham State Teachers College at First Unitarian Church.

MON., MARCH 27—

9:50 A. M.—Chapel Service.
Prof. Z. W. Coombs.
4:30 P. M.—Intramural Bowling, P. G. D. vs. T. U. O.

FRESHMEN!
TECH NEWS assignments every
Monday at 4.00 P. M. in
Boynton 19

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March 21, 1933

FIRE: THE EVER-PRESENT MENACE

Once again the question of smoking in the buildings of the Institute comes before us. There is no doubt that the students are indeed careless and there is a great danger of the demon fire taking its toll of unreplaceable possessions. Without doubt, the building mostly exposed to this great danger is Boynton Hall. This grand old building is one that has seen many years of service and many of the old grads have toiled in its halls when it was the most modern building of its time. There is not a real Tech man who does not look up to its stately portals and admire it for the time-honored tradition for which it stands. How would you feel if in the middle of the night you heard the fire alarm and were told that Boynton Hall was completely wrapped in flames? An investigation would probably show that a smoldering cigarette left by some careless smoker was the cause. What would be your attitude toward this person? Perhaps you would wonder if you were the person that was actually responsible.

There is no reason for this practice to go on. Cooperation between the faculty and the students is the only course open. The faculty realizes this in some respects, as they have met the situation in the EE building. However, this is the most modern of our buildings and is better protected against fire. Why not establish a smoking room in Boynton Hall, our oldest campus structure, and then insist that all of the smoking be done there?

There is not a Tech man who would want to see Boynton Hall damaged by fire, and since the only result with continued smoking will be damage, this condition should be remedied as much as possible, and in the very near future.

Editor's Comment:—President Earle has asked me to make the following comment in this column: "Any student who feels that any member of the Faculty has not given him a fair break or is out 'to get' him should arrange for a conference with me (President Earle) at his earliest convenience to discuss the matter."

The TECH NEWS published last week an editorial in this column discussing the attitude on the Hill among some students concerning the attitude of the Faculty toward them. Here is a chance to talk the matter over with someone who will see that justice is done. Let's play the game square. Those of you who feel that you are misused should do as President Earle requests and straighten things out.

WHAT THE DEPRESSION TAUGHT US

The bottom of the depression is reached! Let us take inventory of its advantages.

It taught us that every man is his brother's keeper; that damage to our neighbors is also damage to ourselves.

It taught us that there is no such thing as absolute independence; that we are all dependent upon others for one thing or another.

It taught us thrift; that two meals a day can be made to do the work of three, in a pinch; that a suit of clothes can be worn more than one season; that the automobile does not have to be traded in every year.

It taught us humility of heart, a lesson which the whole of America needed to learn.

It taught us that Faith is the basis of all values, and that loss of it can close the doors of the strongest bank, and render worthless the finest piece of real estate.

It taught us the wisdom of saving money during the days of plenty!

It taught us the value of meditation and personal inventory from within.

It taught us that there is a law of compensation which reduces all men to a common level in the time of tragedy and chaos.

It taught us that cooperation is more preferable than competition. It taught us the impossibility of acquiring something for Nothing through stock margin gambling.

It taught us that whatever man believes to be true becomes true.

It taught us that money, without Faith, is as cheap as a scrap of paper.

It taught us that confidence can accomplish that which cannot be accomplished by money.

It taught us that an over-abundance, without Faith, is no insurance against panic.

It taught us to spend wisely.

It taught us the folly of preaching the Golden Rule without practicing it.

It taught us that the power back of this universe moves in orderly fashion during a depression the same as at other times; that only men's minds get out of gear and cause men trouble.

NEWMAN CLUB HOLDS MEETING

Doctor Butler Gives Interesting Talk on Work of Albertus Magnus

Doctor F. R. Butler of the Chemistry Department addressed the members of the Newman Club at a meeting held last Tuesday night at Sanford Riley Hall.

He mentioned Dr. Jennings' trip to Europe last year and told of Albertus Magnus, scientist and scholar, who was made a saint just previous to Dr. Jennings' visit to the continent.

Albert Magnus' life covered the period from 1193 to 1280. He was the wisest man and greatest German scholar of that time and was distinguished as a priest, monk, scientist, philosopher, mystic, astrologer, and alchemist. He has since been called the Aristotle of the Middle Ages.

His real name was Albert von Bollstadt. He was a poor scholar, being at first dull and slow. He studied science at Padua, taught theology at Cologne and Paris and entered the Dominican Order in 1223. In 1265 he retired to a life of seclusion and study. He knew all that was known in his time. A theologian, physician, astronomer, chemist, and man of the world, he nevertheless believed, like all others of his time, in transmutation and magic. His knowledge of physical science was, for his age, extensive and accurate.

He wrote a great deal and his chemical writings include "De Rebu Metallias et Mineralibus" and "De Alchymia."

The possibility of transmutation of metals he considered an accomplished fact. He believed this to be easier the more nearly alike the two metals. He thought silver more easily convertible into gold than any other metal and believed they differed only in color and weight. However, he asserts that metal transmutations are difficult and precautions must be taken against errors, especially mere changes in color without alteration in other properties. He held that different species of substances were not interconvertible but he assumed that the metals were all of one species. According to his theory all metals are composed of sulphur, mercury, and water by mixture of these components in different proportions and by variations in the purity of the component parts.

In the practical part of the science he did much excellent work. He studied the chemical operations of sublimation, distillation, etc., and describes apparatus similar to that used today. He studied all the compounds then known and the methods of obtaining them. Distillation was to him a very useful operation and he sought to improve it by the use of different types of cement. He found that the best way of purifying gold and other noble metals from less noble metals was through the repeated strong heating. He understood the parting of silver and gold by nitric acid. He prepared sulphur and arsenic from their ores by sublimation.

He studied the combination of sulphur with metals carefully and showed that in the molten condition sulphur attacked all metals except gold. Cinabar had long been known, but he was the first to explain the process of preparing it by subliming mercury and sulphur together. Sulphate of iron he named "vitriol" and he described the preparation of nitric acid and its ac-

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Eat with the rest of the gang

EXCELLENT FOOD AT REASONABLE RATES

SILENT OPERATION

Mercury switches operate by means of a tiny globule of mercury which rolls back and forth in a tiny glass tube. As the tube is tilted, the mercury rolls to and from the end of a "live" wire and thereby makes or breaks the electric circuit silently, eliminating the usual click that accompanies the ordinary mechanical switches.

Used to control electric current automatically, the field of application of this tiny switch in industry is barely gaining foothold. This new tiny model of a mercury switch is designed especially for the low current uses of today and perhaps portends for the near future an extensive use of "silent" switches to operate many domestic electrical conveniences.

tion on the various metals. The term "affinitas" was used by him as by us to designate the cause of the combination of sulphur with metals.

At the business meeting held it was decided to hold a Communion Breakfast on April 2. Details concerning this affair will be issued later.

DID YOU KNOW?

That two of those who constituted the faculty during the 'seventies are still living? They are Thomas E. N. Eaton and U. Waldo Cutler.

Professor Eaton, known to all students as "Tene," from his initials, was a graduate of Amherst, and was appointed instructor in mathematics in 1872, at a salary of \$1,200. The following year he became junior professor of mathematics, and for nearly two decades was the idol of the entering classes. Ill health forced him to resign in 1891. In California he renewed his youth, and up to a few years ago taught in a high school there. Though now totally blind he is enjoying life and his memories of Worcester.

Professor Cutler, whose nickname was "Baldy," was a Tech graduate, '74. He was appointed instructor in languages, at \$800, in 1877. He became professor and head of the department in 1892, a position which he held until 1903, when declining health caused him to withdraw. He also discovered the fountain of youth, and today is the active director of the Worcester Historical Society.



It takes
resourcefulness . . .

Time and again, Bell System engineers have demonstrated their pioneering bent in working out unusual telephone construction problems.

For example, they laid a huge conduit under the Harlem River. They dredged a trench in the river bottom, lowered enormous sections of iron pipe, sent down divers to join the sections, encased the finished tube in concrete. Through this they ran telephone cables forming one of New York's main lines of communication. Across the Gila River in Arizona they constructed a catenary span 2373 feet long. To bridge oceans, they developed radio telephony. They have built telephone lines over mountains, across deserts, through swamps.

Their resourcefulness in getting through, over or under natural barriers makes possible telephone service that is practically world wide in reach.

BELL SYSTEM



SAY "HELLO" TO MOTHER AND DAD
...RATES ARE LOWEST AFTER 8:30 P. M.

DORMITORY FROLIC

The fourth monthly dorm frolic of the college year was held last Wednesday evening at 6:30 o'clock. The speaker of the evening was the popular Professor Harold A. Maxfield, superintendent of the dormitory. His topic had previously been announced as a general survey of "England, France and North Africa." However, at the beginning of the frolic, he changed the subject impromptu to "My World War Experiences in France." Before he began, Mr. Locke, as assistant superintendent of the dorm, spoke on the removal of door knobs and issued a few warnings pertaining to any knob-lifter or other type of wrecker who was apprehended.

The frolic then turned to the enjoyment of the occasion. Within five minutes Professor Maxfield had the gathering of students present doubled up in mirth. He kept them in this condition until the conclusion of the talk by the narration of humorous anecdotes which he intermingled with his more serious adventures.

According to the story, after the usual training period in this country he had left for England. Upon his arrival there he was very unfavorably impressed by the living conditions that existed in large British cities as, for example, Liverpool.

It was with few regrets that he left for France a short time later. Le Havre was one of the coldest cities he had ever been in, according to his account.

He soon became a member of a French training school. It was a life that would daunt even our hardy Tech students. After an early reveille he would proceed to class with his fellow soldiers where they would be given a four-hour examination. In the afternoon, the rookies would sit on extremely hard wooden benches and study. Each room contained something over one hundred students and had an officer on guard during each of these afternoons. In the evening, half an hour recreation was allowed and then every man studied until taps at eleven o'clock. His roommate usually began to shave at one minute to eleven and finished by the beam of a flashlight as lights had to be extinguished at eleven sharp.

One week-end he hopped a freight train to Paris where an enjoyable day or two was in store for him. Strolling down a Parisian boulevard, a scintillating display of necklaces and rings caught his eye in a jewelry shop window. One necklace particularly attracted him and he determined to purchase it and give it to his mother when he returned home. The latter part of this ambition was never executed, because after showing it to everyone he knew and losing it under circumstances which gave him a great deal of trouble, before he found it again, he finally mailed it to her in order to avoid any further possibility of losing it.

Another choice anecdote dealt with a soldier who was so large and had such big feet that no regulation army shoes would fit him. An order was despatched to the United States for the desired shoes but here Fate stepped in again and had the two shoes sent in separate packages as they were too large to both go into the regulation size package used in the mails. The poor rookie received one shoe but never learned the fate of the other one.

Professor Maxfield was on the front actually a short time and was connected with the heavy artillery. His memory led back to one harassing episode in which a German plane dropped a bomb that exploded not fifty yards from the quarters that he was stationed in.

He also included a short technical discussion of types of guns, methods of mounting them and the mathematics employed to find the range of a shot.

The interesting talk was concluded by the ever-popular refreshments, ice cream, which concluded the evening in the approved manner.

"MAN"

Chapel Talk by Dr. Atwood

Ecclesiasticus: 34: A well-instructed man knoweth many things; and he that has much experience will declare understanding. He that hath no experience knoweth few things; but he that has wandered shall increase his skill. In my wandering I have seen many things; and more than my words is my understanding.

As sunset fades, the shadow of the earth creeps slowly upward until it shrouds the entire sky. In the same manner, the shadow of the past hovers over all the accomplishments of the present. If we want to understand the social developments of our own era, if we are anxious to confront this thing called life as adequately trained men and women, we must seek to broaden our experience through some acquaintance with the intellectual, the emotional, and the spiritual history of the human race. We are fortunate today because there are many books available for the general reader, books that will give him an insight into the vast heritage of the past, such volumes as Wells' "Outline of History," Lucky's "History of European Morals," or Frazer's "The Golden Bough." It doesn't matter whether we're going to be engineers or whether we're going to be mere college professors; we owe it to ourselves to acquire some degree of familiarity with this vast field. We can all lay aside from time to time the latest mystery story and spend an hour or two delving into the far more thrilling mysteries involved in the flowering of the human mind and soul.

As we go back to prehistoric man, we find an ungainly creature swathed in coarse matted hair, with bestial features, probably with no more than a spark of other than animal intelligence, interested only in food and shelter and the jealous defence of what is his. And yet, as thousands of years pass by, objects round about him raise questions as to the how and the why, one impression in the brain relates itself to another, ideas begin to stir and seethe under the impulse of curiosity. With feeble but steady gropings, the mind commences to grow, and continues its upward evolution until today that primeval curiosity has given us a modern science whose possibilities remain unfathomed.

We may easily guess that emotionally the cave man was exceedingly unstable, exercising little if any control over his passions. Anger more often than not resulted in cold-blooded murder. Greed meant the attempt to appropriate violently to one's self what belonged to another. Lust existed only to be satisfied at any cost. There remains, to be sure much of this primeval emotionality in us all, but it is the exception that proves the rule, for centuries of experience have taught the average civilized man of today to curb the wild surges of his emotions and to convert them into servants to minister to his needs. It is interesting to see how the emotional development of mankind has fostered love of the beautiful and given the world its many master works of painting, sculpture, music, and literature. Through the emotions again the coarse moral code of primitive man, if indeed he possessed any, has become transmuted into an infinitely finer moral law. The first men stood for unrestrained individualism. Life was a blood-stained battlefield where none but the fittest survived. No rights and privileges of any kind were admitted save those made valid by brute force. Gradually new conceptions formed themselves. Isolated dwelling in inaccessible caverns ceased, as did also nomadic wanderings and from love of family developed communal feeling, a sensing of human brotherhood. Man came to realize the rights of other men to be unmolested, to live peacefully, to own property. The settlement of personal differences by bloodshed grew less frequent, and as time passed systems of law took the place of individual fantasy. The idea

of duty originated. Conscience stirred within the soul of man. Savagery had disappeared, civilization had commenced.

Conjointly with the moral sense, the religious sense unfolded through a long process of development. The early adoration of purely natural phenomena had within itself the germs of superstition, which lifted its head in many forms, some unspeakably vile and loathesome. Obsequious homage, quite often in the form of human sacrifices, was rendered to brazen images, and idols. But such artifices could hardly hope always to satisfy a spiritual life which did not remain dormant but constantly progressed in an upward direction. The idea of God must always correspond to the aspirations of His worshippers, and slowly the great religious systems of the world took shape: Buddhism, Mohammedanism, Judaism, Christianity. And along with religion, we find its handmaid, philosophy, concerning itself with the intricacies of speculative thought.

This modern world is a most complicated organization in every respect, and at its heart stands the tiny figure of man, physically almost a pitiful object, a mere reed, incessantly subject to destruction, yet dominating through the sheer power of his mental, emotional, and moral development. Surely the study of his progress merits attention and should stimulate our interest as nothing else can do. As we trace the evolution of humanity, witness the tragedy and the comedy of human endeavor, we begin to acquire a sense of proportion. Present day problems cease to be as significant and become far more comprehensible when considered in the light of eons of time. Then, too, we learn to appreciate the enormous debt that we owe to all the men and women that have toiled and fought and perished since the infancy of the race that we of the twentieth century might enjoy the standards that we do. And most vital of all, this study should inspire us to help on the forward march,

to rid ourselves of the pernicious notion that we have no duty but to ourselves. There are many today who ridicule such an idea, who demand that we prove it, something that I don't suppose we can actually do. But only a man whose heart is rotten to the core with selfishness can look back upon the struggles of humanity from prehistoric times on and fail to hear the challenge of the past to us of the present to take our places in the vanguard of those who seek to enrich still more for future generations the heritage that fell to us. Knowing what man has done in the past with his mental, emotional and moral equipment, we can face these days of trouble and apprehension, not with uncertain hope, but with a steady assurance that the human mind and soul will somehow triumph again.

A TECH HOBBY

In spite of the fact that most of the time of Tech students is taken up with studying, many find time for hobbies. These hobbies include stamps, photography, boats, airplanes, engines and all sorts of other things. Because this is strictly an engineering school, a hobby like poetry writing seems strange and out of place. However, in the next few issues, the TECH NEWS will print a series of poems and a story written by a student on the hill who makes writing, in his spare time, a hobby. Below is the first of these contributions:

REVERIE

One more night spent alone
Thinking and dreaming of you.
Sitting in my chair at home,
Trying not to be blue.

Wondering what you are doing.
If you ever think of me.
Your lovely eyes seem to be smiling
And then the vision fades.

I am alone again, once more
The soft music makes me drowsy.
I can feel sleep's long fingers
Trailing over my eyelids.

DEPT. NOTES

AERONAUTICS

The Air Corps at Wright Field has become so interested in the streamline tires developed by the B. F. Goodrich Co., that it has written specifications covering the complete line. Drag tests and airflow patterns for these tires were made last summer in the Institute wind tunnel.

Mr. E. R. Spaulding has not yet left the hospital and it is doubtful if he will be able to return to the Institute this year.

PHYSICS

A plan for developing initiative and independence is being tried in the work in Physics for Junior Electrics. Each worker is allowed to choose from a wide field an experiment in which he is particularly interested and in which he must depend on his own ingenuity for working out the details of the experimental method. So far the system has been very successful, although some rather startling results have been reported.

Dr. Jennings spoke before the Freshmen last Friday at one of their orientation talks. Resplendent in a large green flower he endeavored to impress upon them the benefits to be derived from the pursuance of chemical engineering.

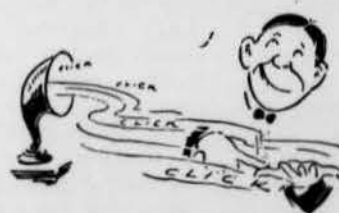
CHEMISTRY

There was a meeting of the Skeptical Chymists Tuesday evening, March 21, at 7:45 in the Salisbury Laboratories. The speakers were Mr. Press and Mr. Smith. Refreshments were served.

Dr. Butler addressed the members of the Newman Club last Tuesday night. He spoke on "Albertus Magnus" alchemist and scientist of the thirteenth century.

My head sinks lower and lower,
And then I wake with a start.
You stand before me, lovely as a flower.
But no. I guess I was dreaming.
July, 1932.

G-E Campus News



COUNTING COSMIC RAYS

We hear a lot about cosmic rays, but know little about them. Some believe the rays are the birth cries of new matter, photons, which are like light rays. Others believe they're electrons, the death rattle of matter as it radiates itself away. But whatever the rays are, they come to us from every direction, night and day.

One of our engineers, Chester Rice, a '10 grad of Harvard, didn't think cosmic rays were so mysterious. He even perfected a device to count them. Imagine—counting cosmic rays! He counts them with a nickel cylinder detector that is suspended in a low-pressure tube. It's shielded by a housing of lead, 4 in. thick, to keep out the effects of radioactive material. The rays, passing into the cylinder, initiate corona discharges, which are fed into an amplifier, then through a radio loud-speaker. The rays can be heard as distinct clicks. The small cylinder has a count of eight rays per minute.

DNEPROSTROY

On October 10th last, the largest masonry dam ever built was dedicated in Russia. It's part of the tremendous Dneprostroy hydroelectric development. There, Charles Thomson, who completed his engineering course in '13 at the South African School of Mines, Johannesburg, Transvaal, was honored by the U.S.S.R. He received the Order of the Red Banner of Labor for his skill. His had been the job of erecting all the electric apparatus. And some job it was!

As a construction engineer for General Electric, he spent 18 months in Russia. He put into operation the nine enormous 77,500-kv-a. generators, five of which were built by G.E.

They're the largest water-wheel generators ever built. Incidentally, it was some achievement, considering the enormous weights, to ship the G-E generators and transformers nearly 6000 miles—and then to put them into operation successfully. Even engineering veterans were astonished.



MEET THE PHANTOTRONS

Boston, proud guardian of the Beans and the Cods, has been harboring another celebrated family, lately. The name is Phantotron; present condition, that of lusty infancy; job, rectifying alternating current.

Housed in the Salem Street substation of the Edison Electric Illuminating Company in downtown Boston, this equipment is changing alternating current at 13,800 volts, 3-phase, 60 cycles, into direct current at 238 volts. Listed advantages: no moving parts, silent operation, high efficiency, economy in floor space. Six tubes, with a combined rating of 600 amperes, are employed. They are an outgrowth of the vacuum tube used in radio sets, but have a current capacity 100,000 times greater.

The Phantotron rectifier, a highly desirable neighbor, comes from good old G-E stock, incubated in the Research Laboratory in Schenectady. Incidentally, Harry Steiner, a University of Kansas grad of '26, is largely responsible for its engineering and design development.



GENERAL
ELECTRIC

WINTER SPORTS SUMMARIES

TECH CAGERS CLOSE POOR SEASON, WINNING ONLY 4 OUT OF 16 STARTS

Wins from Northeastern, Clark and Brown, and Many Close Games Keep Season Interesting Despite Losses

GARTRELL, DECKER, HAMMER AND MERRELL PLAYED LAST SEASON ON ENGINEERS' COURT

With ineligibilities and injuries wreaking havoc among the players, the Worcester Tech varsity hoop talent captured but four victories in 16 starts during the season just concluded. Though the record may indicate an unimpressive campaign, such was not the case for in at least six instances decisions were dropped by hairbreadth margins.

Starting the season with a group of inexperienced performers, Coach Pete Bigler saw his charges go down before a smart Boston University quintet at Alumni Gym, 32 to 22. Lack of teamwork and characteristic uneasiness of opening games was noticeable among the Engineers. There followed a 30 to 26 loss to U. S. Coast Guard Academy at New London and a 32 to 19 setback at the hands of Trinity here.

Taking on a new lease of life, the Tech machine upset a highly confident Northeastern University team at Boston, 40 to 37. Starting the game with a substitute lineup, the Huskie coach had cause to regret his rashness when the Bigler men ran up a score too large to be overtaken by even the N. U. regulars. The Boynton Hillers clicked for the first time as a unit and the result was a painful surprise to the Bean-towners.

Proving that the Northeastern setback was no flash in the pan, the Techsters proceeded to hand Brown a 41 to 32 drubbing at Providence two days later. The work of Captain Irv Gartrell and Tom Decker was outstanding with the Engineer leader coming into his own and leading the scorers with 14 markers.

Always a poor road team, Tech dropped a heartbreaking 28 to 26 tilt to New Hampshire State at Durham in its next appearance. A last second flip decided the decision in favor of the hosts. In the last set-to before the finals, the Crimson and Gray dropped a 38 to 27 contest to Tufts at Alumni Gym. The play of the Engineers was far below the standard set in the previous recent battles.

Final exams handed out the next loss to the ever trying Bigler men. When the final results became known, Tom Ratkiewicz and elongated George Hodgkinson were forced to give up the court game for the remainder of the season. The former was especially valuable as a guard in view of his height and fine shooting eye. Hodgkinson had been alternating with Mike Skwarek at the pivot post all season.

An artistic shellacking was handed the Engineers upon resumption of activities by a clever and able Springfield College team. Tech jumped into the lead at the outset of the game and for a time seemed headed for a stunning upset. Apparently the Gymnasts had not been warmed up sufficiently for ere long the score was reversed and when the smoke of battle cleared, Springfield led 44 to 26. The Biglermen were humbled further when a mediocre Connecticut Aggies aggregation downed them 29 to 25 at Storrs a few nights later.

Having reached the limit of their dilemma with the Connecticut Aggies tilt, the Bigler men flashed with all the fury at their command against Clark in the first of the annual two-game series at Alumni Gym on February 18 and the result left the Scarlet limp and weary and on the short end of a 44

to 27 score. The game was the highlight of the Tech season to date. Johnny Noreika and Joe Sukaskas, the Tech guards, left little to be desired as they held the Clark forwards to nine points in the first half. Coach Bigler inserted a substitute lineup into the fray in the second period with the regulars returning later to complete the rout of the aspiring Amiot men.

The next week found the Engineers dropping a 32 to 26 tussle to Wesleyan in their next appearance. The greatest battle of the campaign took place on Washington's birthday at Alumni Gym with Upsala finally edging out a fighting Tech five 35 to 34. Trailing by ten points late in the second period, a desperate wild Tech barrage brought the score up to 34 all with less than a minute to play. A charity toss made good in the last few seconds brought the "Upsies" victory.

Clark presented a more formidable attack as the inter-city rivals met at South High on the week-end and for a time it seemed that the Scarlet was going to realize a four-year ambition in downing Tech. The Main South five led by 13 points at half time. With the resumption of activities, Tech opened up and slowly but surely crept closer to the Clark score. With five minutes left to play, the Boynton Hillers went into the lead and eventually won out 32 to 28.

The final three games on the Tech schedule found the Engineers losing 49 to 26 to Mass. State, 46 to 22 to Providence and 49 to 28 to Rhode Island State. Louis Bush had another "field day" against the Boynton Hillers in the Mass. State fray while against the Friars, Tech was simply outclassed. Extensive injuries hurt the Engineers' chances more than a little against Rhode Island State.

Graduation will take Captain Gartrell, Tack Hammer, Tom Decker and Dick Merrell from the Tech ranks. With such cagers as Mike Skwarek, Johnny Noreika, Sonny Norton, Joe Sukaskas, Tom Ratkiewicz, George Hodgkinson, Marshall Dann and Dick Duvall available for the 1933-1934 season, Coach Bigler is hopeful that the former Tech basketball glory will be regained.

Composed entirely of Freshmen for the first time, the Tech jayvees copped three wins in eight starts. Victories were scored against Classical High, Lincoln Square Boys' Club and Clark Jayvees. Potential varsity material was found in Captain Whitey Hiller, Dan Harrington and Harold Henrickson.

MACADAM COURTS READY FOR TENNIS CANDIDATES

Formal Call Issued Soon

Mr. V. Russell Corsini, tennis coach says that although official practice won't start until some time after April first, anyone who wishes to get into shape before the official season may use the macadam courts by the gym at any time.

Although Capt. Umberto Corsini is the only member left from last year's team, Mr. Corsini is encouraged by the calibre of tennis shown in the Interfraternity matches played last fall, and hopes to draw enough material from these players to supplement any others of varsity potentialities who may come out; and he looks forward to a good season with a strong, well balanced team.

TRACKMEN HANG UP GOOD RECORD

Jensen is Star Performer---Lose Jensen and Lyman in June

With a record of one win and one defeat in the meets, and two firsts and one second place in the relays, the track team has concluded its winter program. The stellar performing of Harry Jensen, Ken Moran, Jack McGrath, Kalista, Lyman, and Doyle provided the punch necessary to carry the team through the season successfully.

For the first meet of the season, the team traveled to Providence only to be defeated by the Brown Bear, 42½-34½. Brown captured four out of nine firsts and made a clean sweep in the 45-yard dash, in which event the Tech runners were supposed to be strong. Harry Jensen featured for Tech, taking two firsts.

The next week the Tech relay team went to Boston and entered the mile relay in the K. of C. meet. They came out on top in a three-cornered race with Mass. State and R. I. State, in the fast time of 3:35 which is a new school record. The team making this record consisted of Beebe, Moran, Sullivan and Jensen.

After midyears the relay team again journeyed to Boston, this time to enter the B. A. A. track and field carnival. They again came through to win in a triangular affair with Colby and Brown. Colby was behind from the start, so the race lay between Tech and Brown. With the race apparently lost, Jensen managed to catch the Brown runner and was fouled by him, thus giving Tech the race in the time of 3:36.

A week later the relay team lost its only race of the season in the University Club Relays. Again racing Brown and Colby, the Tech runners were edged out by Colby by only a few inches. It was a close race throughout and the two were on practically even terms when they started down the home stretch. The Colby runner, however, held a little lead and finished first.

On Washington's birthday the track team again went into action and traveled to Amherst to win over the Mass. State array, 49-23. In this meet, its last indoors of the season, Tech took five out of eight first places and plenty of second and third places. Harry Jensen again starred for Tech, taking one first, tying one, and getting one second. Other Tech men capturing first places were McGrath and Kalista, while Lyman and Whitcomb tied for the other.

Although the team will be hard hit by graduation, the prospects for next year are bright, for there are several lower classmen who show promise. These men, together with the veterans who will be eligible, will form an excellent nucleus for Coach Johnstone to build a team; one which should duplicate the successful season just concluded.

BOWLING

During this last week the Intramural bowlers held their places with T.U.O. leading T.X. by 1 point, with the Friars and A.T.O. tied for third place and Phi Sig close behind in fifth place.

During the coming week, the probable winner of the league will be decided.

STANDING			
	Won	Lost	
T.U.O.	15	5	P.S.K.
T.X.	14	6	P.G.D.
A.T.O.	12	8	L.X.A.
Friars	12	8	S.O.P.
			S.A.E.

TECH TANKMEN SHOW FIVE WINS AT END OF SUCCESSFUL SEASON

Coach Grant's Men Lose Only to Springfield and Trinity During Season

FRANKLIN IS INDIVIDUAL STAR; FALVEY, FONCE, WILEY AND FOGG CLOSE BEHIND

Tech mermen enjoyed a very successful season, winning five meets out of the seven competed in, the meet with Springfield was lost by a large score, but the Trinity meet was a heart-breaker and was lost 37-34, the 200-yard relay being the deciding factor and this event being won by Trinity by inches. Nevertheless, the Tech natators deserve a great deal of praise for the good work that they have done and should be supported much better than the team has been supported. Coach Grant is quite pleased with this season's team which was composed mostly of sophomores and who showed up very well in their respective events. Dick Falvey of '35 and Makela of '35 are very steady placers and held first places in the breaststroke and 440 respectively. Falvey has also broken the pool record in the breaststroke in the final meet of the year against Bowdoin.

Coach Grant invaded the Nutmeg State with his charges on December 16, and laid down a barrage of first places on the Conn. Aggies aggregation of Storrs, Conn. McNulty, Falvey, Makela, of '35, competing on the varsity team for their first time all came through with first places. Tech finally emerged from the fray with a total of 59 points to Conn. Aggies 18. Tech copped seven first places out of a possible nine as well as many second and third places.

Following the Christmas recess on January 14, the Engineers again invaded enemy territory, this time Middletown, where the fair college of Wesleyan is located. Results of this meet further strengthened the prospects of an excellent season. The boys took six first places out of the nine events and though Wesleyan, a very strong and powerful aggregation, took nearly all the other places the final score resulted in 46-31 in favor of the Crimson and Gray boys.

The third meet of the season took place at the Fuller pool at home on January 28, when Tech played host to the mighty Springfield team. The results of this meet were quite disastrous to the Tech team, since they were swamped under a score of 60-17. This meet was extremely hard fought and Springfield swimmers had to churn out three new pool records to win three of the events. Franklin gave the Springfield lads plenty of competition.

After a lengthy period of inactivity the team traveled to Hartford, where they met the Blue and Gold swimmers of Trinity. Stinging with the lash of one defeat Tech started in to clean up taking four of the eight possible events but fell down on their other places, so that the outcome of the meet rested entirely on the outcome of the 200-yard relay. Trinity promptly went out and won this event by inches. Four records were broken at this meet; Franklin of Worcester Tech shattering the pool record in the backstroke, and Falvey smashing the breaststroke pool mark for a loop. The other two records were broken by Trinity men.

Anxious to redeem themselves the team won two very hard fought and brilliant meets at the Fuller pool in the week of February 20. On Washington's birthday, the 22nd, Tech beat Boston University by a very close score of 41-36. Steele of the visiting team nosed out Henry Franklin in the 220 to set a new pool record. This was more than a second better than the record established by Silvia of Springfield in that particular event a few weeks previous. Franklin was also clocked well below Silvia's time. Franklin further added laurels to the W. P. I. swimming team by breaking the college record in the backstroke. Although Boston University men took four first places, Tech's two firsts and seconds in the 440 won by Makela and the breaststroke won by Falvey won the meet for Worcester Tech.

On the following Saturday, February 25, Tech entertained royal visitors by way of the Lord Jeffs. The strong Amherst team came down from the pleasant plains of Amherst and suffered a severe setback, Tech taking six out of the nine possible places. Dave Force equalled the college record in the 40-yard sprint and Franklin again was the high spot of the meet by blasting his own record in the backstroke which he had established on February 22. Amherst took enough seconds and thirds, however, so that the outcome of the relay race would decide the winner of the meet. Since the Amherst relay team had defeated both Springfield and Wesleyan who had in turn defeated Worcester Tech in this event, the Lord Jeffs' men were quite confident as to the results of this event. They were greatly disappointed and chagrined when Franklin of Worcester finished about two feet ahead of their own man, an easy victory and winning the meet.

On March 4th Tech swimmers closed their season in a blaze of glory by defeating the Bowdoin Polar Bears here at the Fuller pool by 59-18. Franklin was the big star of this meet, breaking the record in the 220 and tying the 100-yard record established by Johnny Osipowich of '32. Falvey also took a slice of glory by setting a new pool record in the breaststroke. Tech took seven out of the possible first places and also most of the second. Bowdoin won only the diving which was very close, Capt. Joe Fogg losing by only one point or so. Bowdoin also captured a first place in the backstroke. The Polar Bears were handicapped by the fact that they were extremely under-manned so that the competition was not too keen. In most cases, however, the competition for second places proved to be the keenest. So closed a very brilliant and well coached season.

Tech is quite sure of another good season this coming year as most of the members will still be available for varsity duty. Especially since Franklin, Falvey, Makela, Force and McNulty will still be here and good Freshman material will be available next year.

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OH TESH!

One of the professors here on the Hill who, as nearly as we can discover, passed his sixty-fifth birthday and is well on his way towards his seventieth, cuts the fuel for his fireplace himself. He does it as part of his plan for keeping physically fit. Apparently the plan is a most successful one for there are few "profs" or instructors on the Hill can equal his enthusiasm for work.

The combination of palatial surroundings and an aggressive house detective had a rather dampening effect upon the half-way-thru banquet and prevented it from being the care-free celebration the occasion called for. For the same reason, the entertainment fell flat; the management, through some misunderstanding, forbidding admittance to the "leading lady" until the affair was drawing to a close.

The three Freshmen who have been using the names of various upperclassmen while on their occasional nocturnal forays had better alter their tactics considerably. The aggrieved upperclassmen are now morally certain who the offenders are and are only waiting for something definite before they take action. We hope that a word to the wise will be sufficient.

Some loyal Son of Erin hoisted a green flag on the athletic field flagpole Saint Patrick's Day. As is usual when anyone not personally acquainted with that particular pole tries his hand at the lanyards, the rope slipped off the pulleys and caught so that the flag could not be lowered. It was not until late in the day that the flag was finally removed.

We sometimes wonder why Father Patrick, the Pipe Fitter, insists on referring to the students as "the patients."

Our unknown but most welcome contributor in the Civil Department has furnished the following items. That's dirt in them thar Civil diggings.

Only eighty-seven more days before Commencement—and the breadline. The score board erected by the seniors which gave this brilliant piece of news should contain that tolerance of 365 days that every good civil uses in estimating the moment of his diploma snatching.

You'll see most members of that senior group looking uncomfortable in a clean shirt and even a necktie Thursday afternoon when the boys put on their Sunday-go-to-meeting clothes to be the guests of Major and Mrs. Howe at a tea in honor of Maj. Gen. Walker who is to speak at the Army-Navy dinner that evening. Remember to keep the little finger of the cup hand stiff, fellows.

Mr. E. R. Brown of the Browns of Ashland flared across the sartorial horizon of the drafting room by encircling his neck with a cravat that was an aggressive orange in color. However, his hopes of setting a new and popular fashion in masculine dress were met by a strange lack of enthusiasm on the part of some of his classmates. Investigation showed that these cold-hearted ones were addicted to the habit of the "wearing o' the green" on the 17th of March, the day which the pride of Ashland selected for the debut of his neckpiece. Don't be disconsolate, Ellis. "True individuality can not be copied." (Not an advertisement.)

That nightmare of the Sophomore Civil which sometimes turns out to be the annoyance of the Junior—surely you have heard of railroad curves—has not lost any of its pitfalls with the passing of the years. Those "simple applications of trigonometry" again proved not so simple at a recent exam which left wailing and gnashing of teeth in its wake as many were called

but few had answers ready. It is suggested that when the "new deal" of the national administration reaches the subject of railroad reorganization, it pay some attention to the possibilities of making all tracks of straight tangents so as to eliminate this scholastic burden. After all, a straight line is the shortest distance between two points so why bother with curves at all?

At last a reason why those geodesy problems prove so bothersome. It seems that a problem was handed out containing in the statement a triangle in which all the angles were given. Among the requirements was the one of finding the values of the angles. Mr. John Noreika was quoted as having stated in his lecture made at the post-mortem gathering that he did not consider it necessary to find new angular value. "Any angles that are good enough for the instructor are good enough for me." There's the true Tech spirit—no hi-falutin' stuff in this student body.

Three cheers and a "bird"—the embryo architects will have to get their hands dirty after all. An examination of the schedules in prospect for the "white collar" lads reveals a ses-

sion of machine shop in the schedule of the Junior year. How the mighty are to fall—from Greece to grease.

TAKE INVENTORY OF YOUR RICHES BEFORE QUITTING

If you have a sound body and a balanced mind you are richer than most of the kings who have ruled upon thrones.

Many men who succeeded in life get off to a bad start!

Charles Darwin was a "dull" boy, but his imagination became fired with a definite chief aim and lo! the world had found a genius.

Demosthenes stammered, but he mastered this handicap and became a great orator.

Thomas Jefferson was "lazy," but he caught the vision of a great patriotic ideal and wrote his name in the book of the immortals who have made America the greatest nation on earth.

Thomas A. Edison had an "addled" mind, and his teachers advised his parents to take him out of school because he "did not have enough sense to be taught." He had only three months of schooling in his entire life.

Louisa M. Alcott began as a servant girl!

Robert Burns was an illiterate country lad, and a drunkard into the bargain.

Carnegie began as a telegraph operator at \$40.00 a month.

Charles Dickens began by pasting labels on blacking pots.

Helen Keller became deaf, dumb and blind shortly after birth.

Booker T. Washington was born in slavery and was cursed by his color.

Lincoln was born in a log cabin, in the midst of ignorance and indifference.

Napoleon started as a private in the French armies.

Alfred E. Smith began as a fish peddler on the poverty-stricken East Side of New York.

Beethoven was deaf and Milton blind.

Milo C. Jones made a fortune out of "Little Pig" sausage after he had been

stricken with paralysis and could not move a muscle in his body.

Neysa McMein slept in an attic, in New York City, before her front-page magazine drawings began to bring her \$3,000 each.

All of these had misfortunes greater than any you will ever know, if you have a sound body and a sound mind.

When you begin to feel that you haven't an equal chance with others, think of these great souls and make a fresh start right where you stand, using whatever tools you have at hand, and soon your star will begin to ascend.

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want, and you don't have to
take what you don't want*

It's like this: You don't want
a strong, rank cigarette; you
don't want one that's tasteless.
You want one that lets you
know that you are smoking, but
you don't want one that's bitey.

Chesterfields are milder...
and yet They Satisfy.

Chesterfield
the cigarette that's Milder
the cigarette that TASTES BETTER

BLOWING RUBBER BALLS

Many readers have often wondered how rubber balls are blown up without any trace of a valve to let the air in. The answer is that they aren't blown up from the outside but from the inside.

The two rubber hemispheres are made in moulds and vulcanized together. Before they are sealed, however, two "pills," one containing sodium nitrite and the other ammonium chloride, are inserted. The biscuit, as it is called, is then sealed and put in a form and heated. The heat produces chemical action, and sodium chloride and ammonium nitrite are formed. The ammonium nitrite is unstable, however,

and breaks down into water and free nitrogen. It is this free nitrogen that keeps the ball blown up.

To obtain a ball with a six-inch diameter, four grams of sodium nitrite and three grams of ammonium chloride are used. To obtain the necessary pink elephants and green giraffes that always adorn rubber balls, the forms that the biscuits are heated in, have indentations for the soft rubber to swell into. On cooling, the balls retain their forms, and the animals remain raised on the surface. If the animals are to be colored, the balls are placed in other forms where all but the animals of one color are inclosed. The paint is then sprayed on by machine.

UNIVERSITY DUELLING RECEIVES APPROVAL

The right of university students to engage in "friendly" duelling has been upheld recently by courts in Berlin, Germany, thus giving a further setback to those reformers who would banish this custom of German student life. Although student duels have declined greatly since the war, they still hold a strong place in the life of certain student groups. Recently a student was released by a court, although his opponent had died as a result of the battle. Saber cuts are still worn with pride and even a feeling of superiority by many who otherwise are modest and innocent appearing first or second year students.

Duelling corps are similar to American fraternities, except in their activities. Duels are held secretly. The duelists are protected by heavy vests, but the heads and faces are left unprotected. Usually a club physician and servant is present. The youngsters fence until both have received scars large enough not to be ashamed of, then if neither is too seriously hurt they join their comrades and proceed on an extended drinking bout.—NSFA.

At the University of Amsterdam, American students are awarded the highest rating on the campus. They are the only ones of the student body permitted to drink and chat after the one o'clock curfew.—NSFA.

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ILLUSION:

A large packing case is exhibited on a raised platform. A young woman climbs into the box. Head, hands and feet protrude, and are held by spectators while the magician takes a crosscut saw and, with the help of an assistant, saws through the center of the box and apparently through the woman.

EXPLANATION:

There are many explanations for this illusion. One method of performing this illusion requires the presence of two girls in the box. One girl curls up in the left half of the box with her head and hands protruding, giving the effect you see illustrated above. The other girl is doubled up in the right half of the box, with only her feet showing. Nobody is sawed in half.

It's fun to be fooled — ...it's more fun to KNOW

Cigarette advertising, too, has its tricks. Consider the illusion that "Flavor" can be achieved by some kind of magical hocus-pocus in manufacturing.

EXPLANATION: Just three factors control the flavor of a cigarette. The addition of artificial flavoring. The blending of various tobaccos. And the *quality* of the tobaccos themselves.

Quality is by far the most important. Domestic cigarette tobaccos vary in price from 5¢ a pound up to 40¢ a pound. Imported tobaccos vary from 50¢ a pound to \$1.15.

No wonder, then, that cigarettes differ in taste—since distinctive, *pleasing* flavor depends so largely upon the blending of the *costlier* tobaccos.

It is a fact, well known by leaf tobacco experts, that Camels are made from finer, **MORE EXPENSIVE** tobaccos than any other popular brand.

Try Camels. Give your taste a chance to sense the subtle difference that lies in costlier tobaccos... a difference that means all the world in smoking pleasure... in pure, unalloyed satisfaction.



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